

# PATENT ABSTRACTS OF JAPAN

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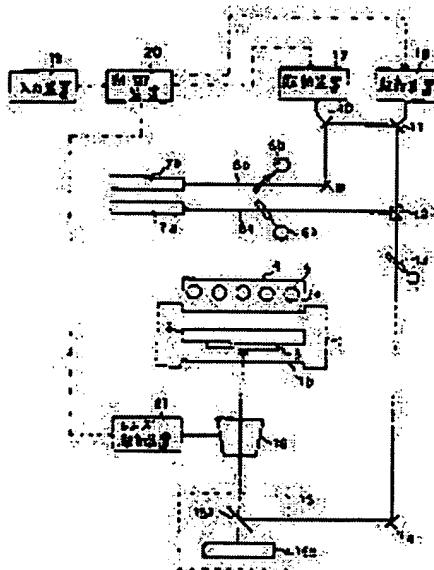
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## (54) BEAM ANNEALING DEVICE

### (57) Abstract:

**PURPOSE:** To enable the specified annealing process to be performed at a specified position on an object to be processed for enhancing the workability and the processing capacity by a method wherein an input means for inputting relative positions on an object to be processed using a plurality of high energy beams and a control means are provided.

**CONSTITUTION:** A semiconductor wafer 3 is arranged on a specified position on the rear surface of a susceptor 2 in a chamber 1 and then the susceptor 2 is preheated by IR lamps 5 through a window 1a. Next, the wafer 3 is scanned and irradiated with laser beams simultaneously nitrogen or oxygen gas, etc., is poured on the surface to anneal the wafer 3. At this time, if the specified distance  $r$  and angle  $\theta$  from an input device 19 are inputted in the input device 19, the positions of reflectors 10, 11 can be respectively controlled by driving devices 17, 18 which are further controlled by a controller 20 so that the relative positions of a sublaser beams 8b to a main laser beams 8a on the wafer 3 surface may be automatically set up to be  $r$  and  $\theta$ . Consequently, specified annealing process can be performed on the specified position on the wafer 3 surface.



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